

**MONTANA DEPARTMENT OF ENVIRONMENTAL
QUALITY**

**NUTRIENT-REDUCING WASTEWATER TREATMENT SYSTEM
DESIGNATION FORM**

DATE: August 4, 2004

APPLICATION SUBMITTAL DATE(S): July 15, 2004

SYSTEM MANUFACTURER: Orenco Systems, Inc.

SYSTEM NAME(S): AdvanTex models AX10, AX20, and AX100 for both mode 1 and mode 3 configurations¹.

DESIGNATED TREATMENT LEVEL²: Level 2 (Can use 24 mg/L for effluent nitrate (as N) concentration in nitrate sensitivity analysis)

CONDITIONS:

- A. Approval extends to future model sizes of the AdvanTex technology if the same treatment technology and AdvanTex treatment media is used.
- B. Due to start-up time lag associated with all biologically mediated nutrient reduction systems (for example, recirculating sand filters), AdvanTex systems may not be suitable for commercial-type systems (for example, campgrounds, RV parks, etc) that are designed to be used seasonally. The applicability of AdvanTex systems for nutrient reduction purposes at seasonal commercial-type systems should be based on a case-by-case analysis.
- C. Approval is valid for residential and non-residential facilities, with no limit on design flows as long as all other applicable laws, rules and design circulars are met.

APPROVED BY: Eric Regensburger

NOTES:

1 Mode 1 systems recirculate partially treated wastewater to recirculation tank that is separate from the septic tank; mode 1 systems can also recirculate partially treated wastewater through the second compartment of the processing treatment tank (i.e. septic tank). Mode 3 systems recirculate partially treated wastewater to the primary compartment of the processing tank.

2 The definitions of level 1a, level 1b, and level 2 are in ARM 17.30.702(9), (10) and (11), respectively.